



PATENT

AMENDMENTS - IN THE CLAIMS

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AUG 19 2004

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Please amend the claims as follows.

1. (currently amended) A method for capturing image and defect information from an image scanned from a medium, comprising the steps of:
capturing image and defect information by a sensor unit during every scan position while
transmitting visible light from a first light source through the medium ~~to capture image and~~
~~defect information by a sensor unit during every scan position; and~~
capturing defect information by the sensor unit during every third scan position while
transmitting infrared light from a second light source through the medium ~~to capture defect~~
~~information by the sensor unit during every third scan position.~~
2. (currently amended) A method according to claim 1, further comprising the steps of:
aligning the sensor unit and/or the medium in a first alignment during transmission of
~~transmitting~~ visible light; and
aligning the sensor and/or the medium in a second alignment during transmission of
~~transmitting~~ infrared light.

3. (original) A method according to claim 1, wherein visible light and infrared light are not transmitted simultaneously through the medium.
4. (original) A method according to claim 1, wherein the medium comprises one of a film, a document, and a photograph.
5. (original) A method according to claim 1, wherein the steps of transmitting visible light and infrared light through the medium occur during a first pass.
6. (original) A method according to claim 1, wherein the step of transmitting visible light occurs during a first pass and the step of transmitting infrared light occurs during a second pass.
7. (original) A method according to claim 1, wherein every scan position comprises three separate scan lines, each scan line associated with either a red, green, and blue channel of the sensor unit.
8. (currently amended) A method for capturing image and defect information from an image scanned from a medium, comprising the step of:
 - (1) alternatively transmitting visible light and infrared light through the medium for each scan line up to n lines in conjunction with capturing image and defect information during visible light transmission and capturing defect information during infrared light transmission;

(2) transmitting only visible light through the medium at each scan line for the next $2n$ scan lines in conjunction with capturing image information during visible light transmission after performing step (1); and

(3) repeating steps (1) and (2) until all image and defect information is captured for the medium.

9. (original) A method according to claim 8, wherein n equals a pixel pitch multiplied by a sensor line pitch divided by a scanning rate.

10. (currently amended) A method for capturing image and defect information from an image scanned from a medium, comprising the steps of:

transmitting visible light from a first light source through the medium to capture image and defect information by a sensor unit during every scan position with the sensor unit and/or the medium in a first alignment; and

transmitting infrared light from a second light source through the medium to capture defect information by the sensor unit during every scan position after moving the sensor and/or the medium to a second alignment different than the first alignment.

11. (canceled)

12. (original) A method according to claim 10, wherein visible light is transmitted through the medium before the infrared light is transmitted.

13. (original) A method according to claim 10, wherein the medium comprises one of a film, a document, and a photograph.

14. (currently amended) A method according to claim 10, wherein the steps of transmitting visible light and infrared light through the medium occur during a first pass.

15. (original) A method according to claim 10, wherein the step of transmitting visible light occurs during a first pass and the step of transmitting infrared light occurs during a second pass.

16. (original) A method according to claim 10, wherein every scan position comprises three separate scan lines, each scan line associated with either a red, green, and blue channel of the sensor unit.

17. (currently amended) A scanner used for capturing image and defect data from a surface of a medium containing an image thereon, comprising:
a first light source and a second light source;
a first switch coupled to the first light ~~switch~~source and a second switch coupled to the second light source;
a power supply coupled to the first and second light switches;

a sensor unit having a multi-linear imager and optical lens, the optical lens adapted to focus light transmitted through the surface of the medium to the multi-linear imager, thereby capturing image and defect information;

an analog to digital converter adapted to convert the image and defect information to digital image and defect data;

a transport mechanism adapted to align the sensor unit and/or the medium for capturing the image and defect information, wherein the transport mechanism is configured for aligning the sensor unit and/or the medium in a first alignment for capturing image information and for moving the sensor unit and/or the medium to a second alignment different than the first alignment for capturing defect information; and

a controller adapted to control the first switch, the second switch, the transport mechanism, and the sensor unit.

18. (original) An apparatus according to claim 17, wherein the first light source generates visible light, and the second light source generates infrared light.

19. (original) An apparatus according to claim 17, wherein the first light source is used to capture image and defect information and the second light source is used to capture defect information.

20. (original) An apparatus according to claim 17, wherein the first light source and the second light source do not generate light simultaneously.

21. (canceled)

22. (original) An apparatus according to claim 17, wherein the medium comprises one of a film, a document, and a photograph.

23. (currently amended) A method of digitizing a source image, comprising:
collecting visible light data and infrared light data simultaneously on at least two color sensor channels at a first increment of scan positions; and
collecting visible light data during a second increment of scan positions greater than the first increment of scan positions on at least one of said color sensor channels ~~simultaneously on at least two color sensor channels.~~